FIG. 1

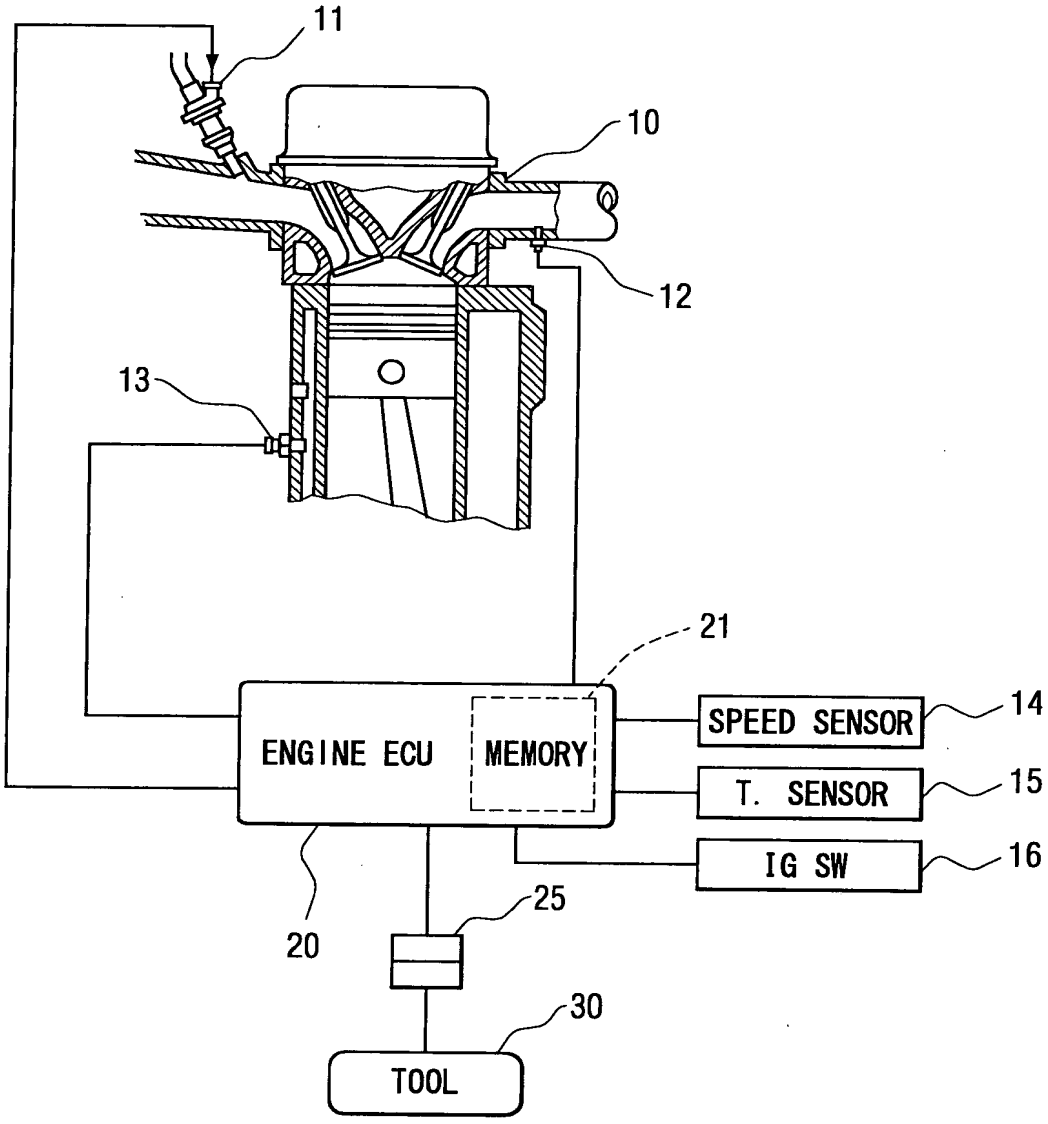
11
10
12
13
21
ENGINE ECU
MEMORY
SPEED SENSOR
14
T. SENSOR
15
IG SW
16
20
25
30
TOOL

FIG. 2

	DIAGNOSIS FREQUENCY (NUMERATOR)	OPERATING FREQUENCY (DENOMINATOR)
B1	$C000	$FFFD
B2	$0000	$0000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 4

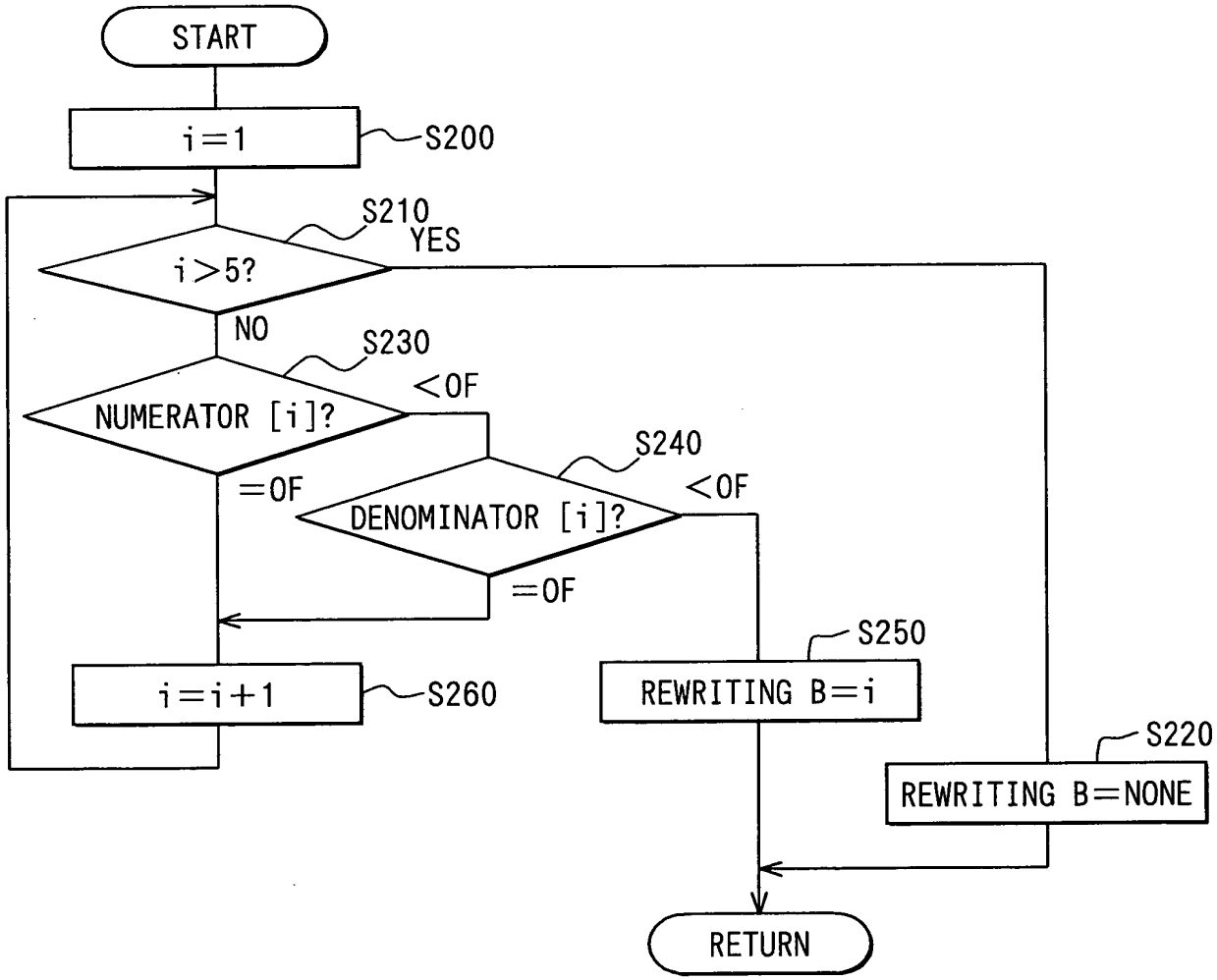

FIG. 3

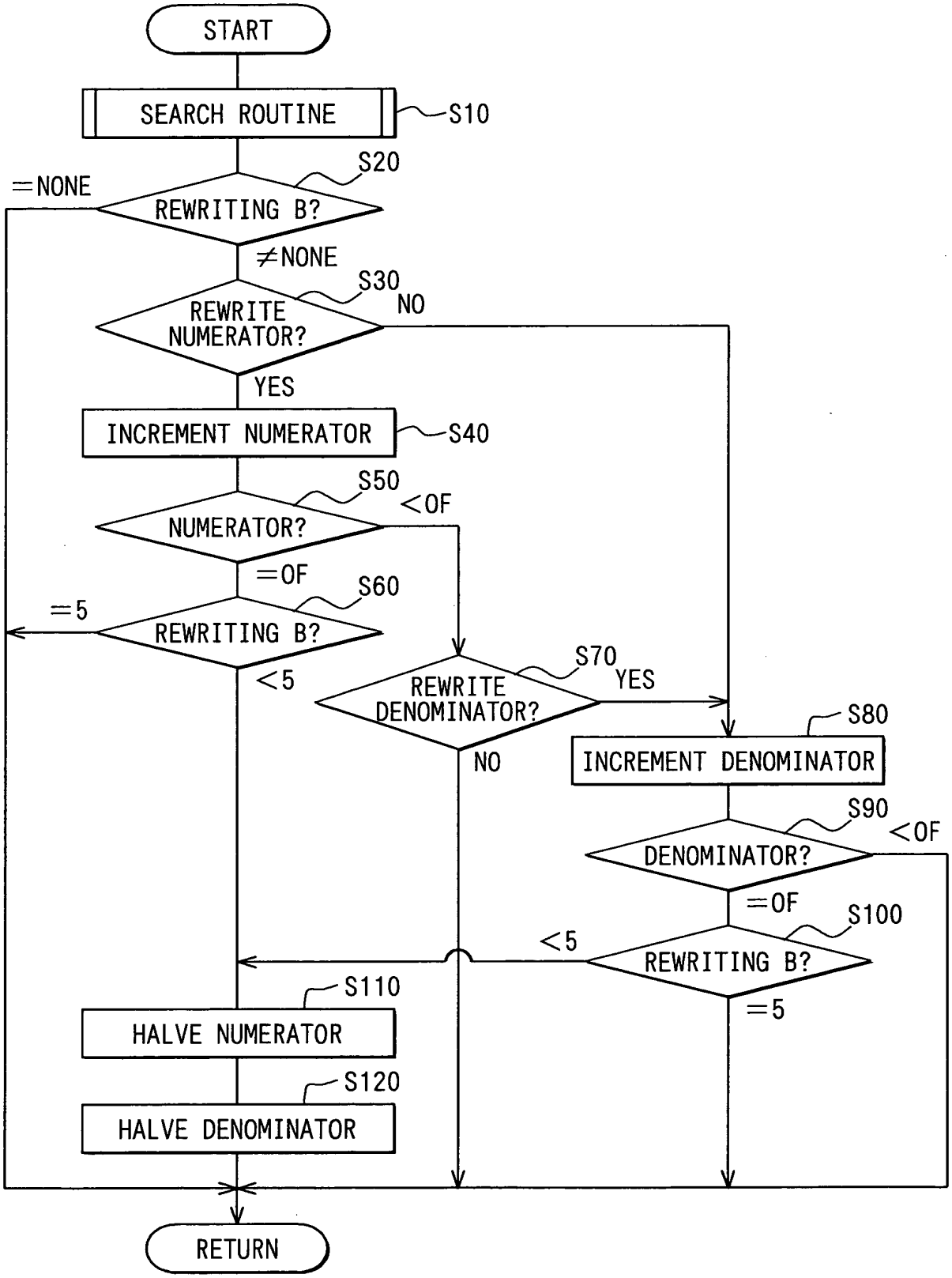
START
SEARCH ROUTINE
S10
S20
=NONE
REWRITING B?
≠NONE
S30
REWRITE NUMERATOR?
NO
YES
INCREMENT NUMERATOR
S40
S50
<OF
NUMERATOR?
=OF
S60
=5
REWRITING B?
<5
S70
REWRITE DENOMINATOR?
YES
NO
S80
INCREMENT DENOMINATOR
S90
<OF
DENOMINATOR?
=OF
S100
<5
REWRITING B?
=5
S110
HALVE NUMERATOR
S120
HALVE DENOMINATOR
RETURN

FIG. 5A

	NUMERATOR	DENOMINATOR
B1	**$C000**	**$FFFD**
B2	$0000	$0000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 5B

	NUMERATOR	DENOMINATOR
B1	**$C000**	**$FFFE**
B2	$0000	$0000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 5C

	NUMERATOR	DENOMINATOR	
B1	$C000	$FFFE	1/2
B2	**$6000**	**$7FFF**	
B3	$0000	$0000	
B4	$0000	$0000	
B5	$0000	$0000	

FIG. 6A

	NUMERATOR	DENOMINATOR
B1	$C000	$FFFE
B2	**$FFFD**	**$F000**
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 6B

	NUMERATOR	DENOMINATOR	
B1	$C000	$FFFE	
B2	$FFFE	$F000	1/2
B3	**$7FFF**	**$7800**	
B4	$0000	$0000	
B5	$0000	$0000	

FIG. 7

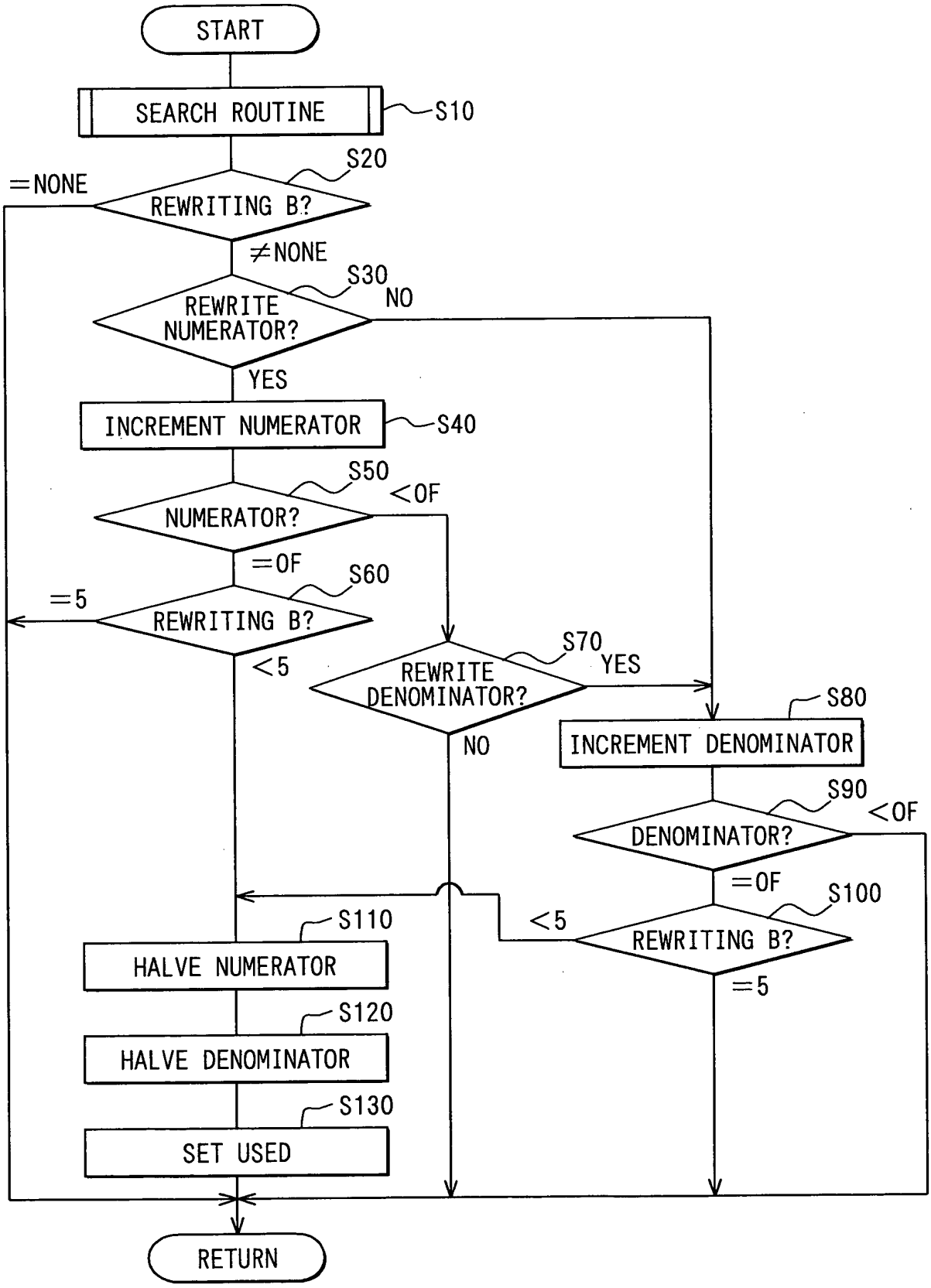
START
SEARCH ROUTINE
S10
S20
REWRITING B?
=NONE
≠NONE
S30
REWRITE NUMERATOR?
NO
YES
INCREMENT NUMERATOR
S40
S50
NUMERATOR?
<OF
=OF
S60
REWRITING B?
=5
<5
S70
REWRITE DENOMINATOR?
YES
NO
S80
INCREMENT DENOMINATOR
S90
DENOMINATOR?
<OF
=OF
S100
REWRITING B?
<5
=5
S110
HALVE NUMERATOR
S120
HALVE DENOMINATOR
S130
SET USED
RETURN

FIG. 8

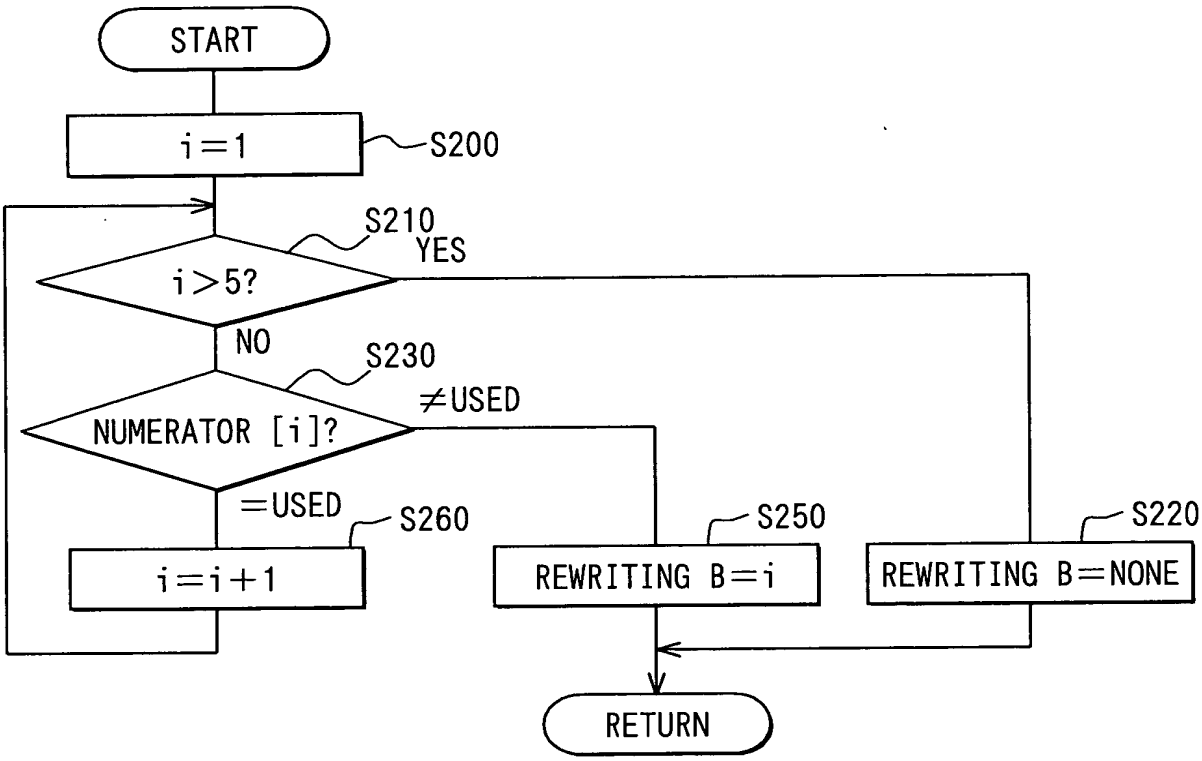

FIG. 9

	USED NUMERATOR	DENOMINATOR
B1	$FFFF	$FFFE
B2	$6000	$7FFF
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 10

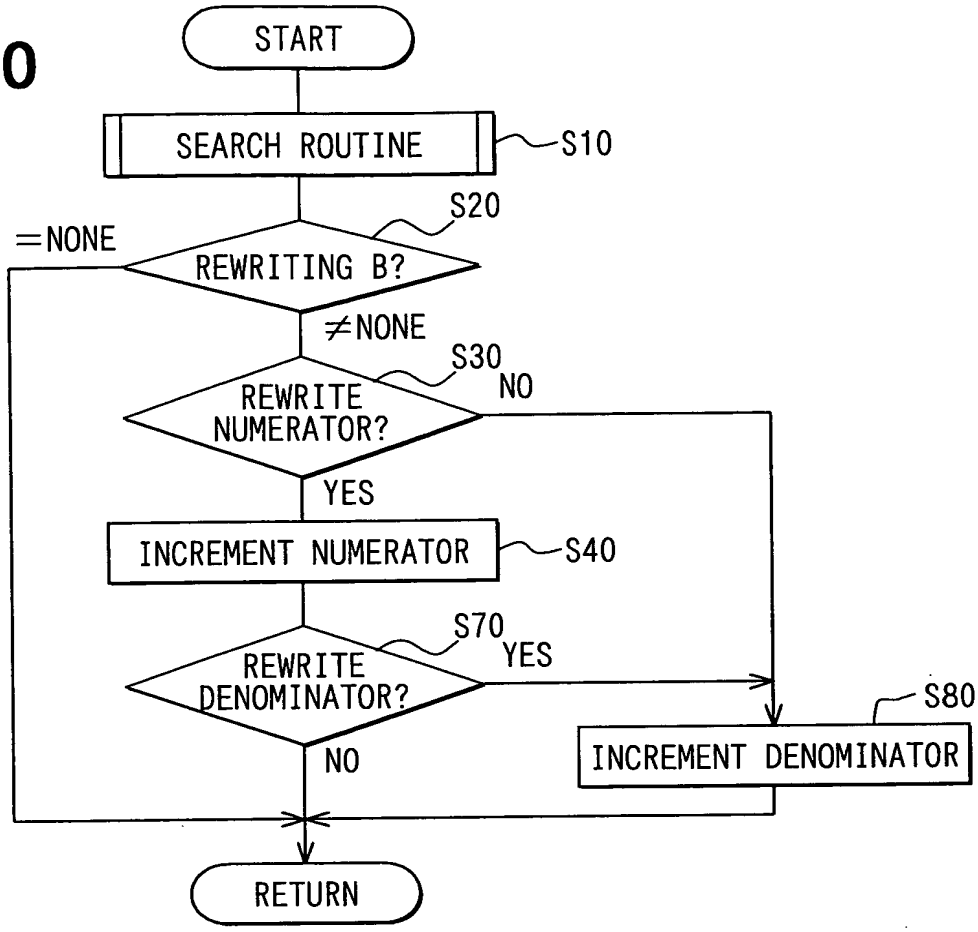
START
SEARCH ROUTINE
S10
S20
=NONE
REWRITING B?
≠NONE
S30
REWRITE NUMERATOR?
NO
YES
INCREMENT NUMERATOR
S40
S70
REWRITE DENOMINATOR?
YES
NO
S80
INCREMENT DENOMINATOR
RETURN

FIG. 11

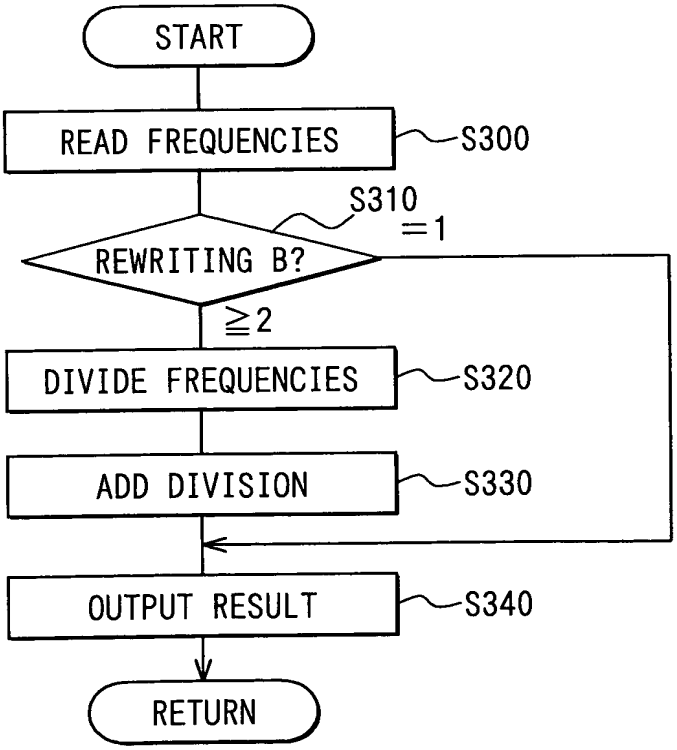
START
READ FREQUENCIES
S300
S310
=1
REWRITING B?
≧2
DIVIDE FREQUENCIES
S320
ADD DIVISION
S330
OUTPUT RESULT
S340
RETURN

FIG. 12A

	NUMERATOR	DENOMINATOR
B1	**$C000**	**$FFFD**
B2	$0000	$0000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 12B

	NUMERATOR	DENOMINATOR
B1	**$C000**	**$FFFE**
B2	$0000	$0000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 12C

	NUMERATOR	DENOMINATOR
B1	**$C000**	**$FFFE**
B2	**$0000**	**$0001**
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 13A

	NUMERATOR	DENOMINATOR
B1	$C000	$FFFE
B2	$FFFD	$F000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 13B

	NUMERATOR	DENOMINATOR
B1	$C000	$FFFE
B2	$FFFE	$F000
B3	$0000	$0000
B4	$0000	$0000
B5	$0000	$0000

FIG. 13C

	NUMERATOR	DENOMINATOR
B1	$C000	$FFFE
B2	$FFFE	$F000
B3	$0001	$0000
B4	$0000	$0000
B5	$0000	$0000